

# 2015-2016 MINNESOTA BOARD OF DENTISTRY SELF-ASSESSMENT

<u>Based on core subject areas of: Patient Communication, Management of Medical</u>
<u>Emergencies, Ethics, Record Keeping, Infection Control, and Diagnosis and Treatment</u>
Planning

Completion of this self-assessment is a required part of your professional development portfolio. You will be granted one (1) fundamental credit per biennial cycle for completion of the self-assessment. You are expected to place the completed assessment in your portfolio. In the event you are audited, the Board will review this document to ensure that it has been completed.

The questions contained in this self-assessment reflect real situations/issues as observed by the Board through the complaint process. The objective is to educate dental professionals in order to prevent adverse situations from happening, thereby protecting the public. It is appropriate to complete this self-assessment either on an individual basis or in a group setting such as at a staff meeting or study group.

If you have answered any of the questions incorrectly, it is strongly recommended that you research the sources referenced and/or attend an educational course in relation to the subject area. **The information and resources provided within this assessment are not all inclusive.** Please review the list of resources, web sites and phone numbers at the end of this document. Be sure to sign and date the Self-Assessment on page 8. Neglecting to do so will result in a failed audit.

# PATIENT COMMUNICATION

- 1. The most common disease associated with latex allergy is?
  - A. Alzheimer's
  - B. Muscular Dystrophy
  - C. Spina Bifida
  - D. Parkinson's Disease
- 2. What population of patients is it *most* important to have wear protective eye wear during dental procedures? Those with:
  - A. Multiple Sclerosis (MS)
  - B. Bell's Palsy
  - C. Parkinson's Disease
  - D. HIV/AIDS

3. Mr. Lips has been a patient at Minnesota XYZ Dental Clinic since 1998. Sunday night he developed a horrible toothache. He called the office around 6 PM. The voicemail noted that the office was closed until Wednesday, while the entire staff attended a dental conference. Emergencies would be handled by Dr. Tongue at an office across town; the message included the telephone number to contact if there was an emergency that could not wait until they were back in the office on Wednesday. Mr. Lips became very upset that his regular dentist would do this to him.

Did the dental clinic follow expectations as they relate to notification and coverage for patients of record?

- A. Yes
- B. No
- 4. I am fortunate to have been able to take extended education and training to gain experience in patient selection and placement of dental implants. Am I able to advertise as a specialist in cosmetic dentistry or implantology?
  - A. Yes
  - B. No
- 5. Dr. Drill's dental clinic is located in a northern rural area of Minnesota. He has a hearing impaired patient who becomes agitated when anyone other than his mother is interpreting. Does the Americans with Disabilities Act make exceptions in cases like this to allow a family member to interpret instead of a trained interpreter?
  - A. Yes
  - B. No

# **MANAGEMENT OF MEDICAL EMERGENCIES**

- 1. During a routine hygiene dental appointment, your patient alerts you that he is experiencing an asthma attack. His symptoms include tightness in his chest, shortness of breath along with a cough. He states it was probably brought on by the run he did right before coming to his dental appointment, combined with just getting over a cold. Unfortunately, he does not have his medication with him. Which medication would be indicated?
  - A. Cough Suppressant (e.g. Robitussin: *Dextromethorphan*)
  - B. Bronchodilator (e.g. *Albuterol*)
  - C. Decongestant (e.g. Sudafed: *Pseudoephedrine*)
  - D. Vasodilator (e.g. *Nitroglycerin*)

- 2. After administering local anesthesia, you begin preparing tooth #19 for a full coverage crown. Your assistant brings to your attention some redness on your patient's neck and you stop the procedure to evaluate. Mrs. Gums complains of feeling nauseated and warm, and she appears pale. As you continue to assess the situation, she complains that her tongue is swollen and it is making it difficult for her to breath. You are not sure, but suspect her symptoms are caused by anaphylaxis. After calling 911, what drug may be given?
  - A. Albuterol
  - B. Epinephrine
  - C. Antihistamine
  - D. Oxygen
- 3. Your patient, Mr. Jaws, presented today for a scheduled extraction of non-savable tooth #2. After reviewing and signing his informed consent form, you updated his health history. It was noted that he had a heart attack over 7 years ago, followed by angioplasty on the same day. Also noted was a double bypass surgery one year later, and that he continues to be monitored by his cardiologist. Patient was started on nitrous oxide and local anesthetic was administered. Mr. Jaws now is complaining of pressure on his chest and pain in his shoulder. You initiate your clinic protocol for angina pectoris (chest pain) and proceed by administering:
  - A. Diazepam
  - B. Nitroglycerin
  - C. Lasix
  - D. Phenylephrine
- 4. What is the most common medical emergency that occurs in dental offices?
  - A. Hyperventilation
  - B. Anxiety Attack
  - C. Syncope (fainting)
  - D. Seizure (convulsions)
- 5. As of July 2013, all licensed dental professionals are required to maintain consecutive (or continuous) and current Healthcare Provider CPR certification. The course should include basic life support, 1 and 2 Rescuer CPR and AED for adult, child and infant with adjusted techniques for each, and rescue breathing along with relief of choking. It is no longer required to have hands-on instruction.
  - A. True
  - B. False

# **ETHICS**

1.	Ed, friend and fishing buddy of Dr. Molar presents for his regular 6 month hygiene visit. During the exam, it was noted that #9 had a small MI fracture that happened over the weekend. Treatment options discussed included smoothing, a composite restoration vs. a veneer or crown. He decided to discontinue the habit of using his teeth to cut the fishing line and schedule an appointment to return the following week for a composite filling to repair #9 and the removal of a mole on his upper back that is always irritated from wearing his life jacket during fishing tournaments.		
	What concerns do you have with this scenario?		
2.	It is one of "those days" in the office. Your primary assistant was out of the office attending a funeral so your receptionist Marie, who used to be an LDA before moving to the front desk and allowed her license to lapse, was doing double-duty today. On top of a full schedule, a patient of record walks in holding a bag of ice to her bleeding mouth. The dentist decides to seat the scheduled patient, and get him numbed up for some ortho extractions. The dentist gets the patient started on nitrous oxide and administers local anesthetic while Marie seats the emergency patient. Marie returns and states Mrs. Johnson tripped over her dog and hit her mouth on her kitchen table. Marie took a PA of #8/9 that is in the developer. You decided to "tag-off" and go see Mrs. Johnson while Marie will sit with the patient on nitrous that is getting numb.  What concerns do you have with this scenario?		
3.	Sandi, DH, LDA has worked at her current office for 9 years. She was offered a job during her dental assisting externship. Dr. Tooth encouraged her after a couple of years to apply for dental hygiene school. She enjoys being a hygienist and loves going to work every day. But lately, she has been concerned that since the death of his wife, Dr. Tooth seems distant at the office. Every couple of weeks he calls in and cancels his morning patients, and when he arrives in the afternoon, she can smell alcohol and the quality of his work just isn't what it used to be. She feels terrible that his wife died. He has been such a great boss and a wonderful person, but she is conflicted on what to do, as she doesn't want to make things worse for him.		
	What concerns do you have with this scenario?		

- 4. The question is often asked: "Can a dental hygienist use a laser?"
  - A. Yes
  - B. No
  - C. Maybe
- 5. Health care workers are required to report suspected child maltreatment. To report suspected child abuse or neglect, contact your county or tribal social services agency or the police. If it is an emergency, call the police at 911.

To find out more about what is considered abuse which includes physical or sexual, neglect or mental injury and how to report it: visit the website for the Minnesota Department of Human Services; Reporting Child Abuse and Neglect: A Resource Guide for Mandated Reporters. Materials are available to help mandated reporters better understand the law and reporting requirements. Dental professionals should become familiar with identifying the signs of abuse and neglect, and learn how to report suspected cases to the proper authorities.

# RECORD KEEPING

- 1. When forwarding radiographs to a subsequent provider; which statement is correct?
  - A. Forward original films.
  - B. The original films should be duplicated, and then forward the originals and retain the duplicates.
  - C. After the patient signs a release, duplicate films should be forwarded.
  - D. Forward duplicate films after their account balance has been paid in full.
- 2. The need to make notations in the patient's chart as to the result of the intraoral and extraoral examination is whenever:
  - A. findings are abnormal
  - B. a precancerous lesion is found
  - C. it is performed, regardless of the findings
  - D. a referral is given
- 3. A licensed dental assistant works for Dr. Pepper on Mondays, Wednesdays and Fridays, an average of 30 hours a week. She/he also works at Dr. Pibb's office on Tuesdays and Thursdays, for approximately 20 hours a week. At her/his non-primary office of Dr. Pibb, what is she/he required to display:
  - A. Initial license and subsequent renewal certificate
  - B. Wallet-sized mini-license
  - C. Photocopies of initial wall license and renewal certificate
  - D. Either A or B

- 4. Your office has recently gone to a "paperless chart" system. To remain compliant with the Minnesota Board of Dentistry MR 3100.9600 Recordkeeping Rule, you are still required to maintain a dental record on every patient which must include: personal data as stated in Subpart 3, the reason for each visit, a medical and dental history including existing oral health, a diagnosis, agreed upon written and dated treatment plan, informed consent, and a chronology of the patient's progress throughout the course visits. Additionally, a dentist using electronic records MUST keep either a duplicate hard copy record or use an unalterable electronic record.
  - A. Yes
  - B. No

# **INFECTION CONTROL**

- 1. How long should you flush waterlines between patients?
  - A. 2 3 seconds
  - B. 20 30 seconds
  - C. At least 1 minute
  - D. Not necessary: flushing is only required at the beginning of the clinic day
- 2. When does the Centers for Disease Control and Prevention (CDC) *Guidelines for Infection Control* recommend using an alcohol hand rub?
  - A. If hands are not visibly soiled
  - B. Any time
  - C. At the beginning and end of each day
  - D. Only before sterile gloving for surgery
- 3. Your weekly spore test just came back positive, even though you use an indicator with each sterilized pack. According to the CDC, which of the following should you do?
  - A. Remove the sterilizer from service and review sterilization procedures to determine whether operator error could be responsible.

YES or NO

B. Retest the sterilizer by using biological, mechanical and chemical indicators after correcting any identified procedural problems.

YES or NO

C. If the repeat spore test is negative, and mechanical and chemical indicators are within normal limits, put the sterilizer back in service

YES or NO

be included in this program are:	
1	4
Z	5
3	6

4. Every dental clinic should maintain a Hazardous Communication Program. Items that should

# DIAGNOSIS AND TREATMENT PLANNING

- 1. Who does not require taking a prophylactic antibiotic?
  - A. A patient with a prosthetic heart valve or who has had a heart valve repaired with a prosthetic material
  - B. A patient with a history of endocarditis
  - C. A heart transplant patient with abnormal heart valve function
  - D. Some patients with congenital heart disease
- 2. A dental hygienist in the state of Minnesota, under general supervision may administer facial cosmetic neurotoxin products (such as Botox) along with local anesthesia as long as the dentist has prior knowledge and has given consent for the procedure.
  - A. Yes
  - B. No
- 3. A 54 year old female patient of record presents for an appointment to check a tooth on her upper right. Mrs. Jones' chief complaint is some pressure, and points to tooth #6. She states to not feeling "the best, might be coming down with something" and also has an appointment with her Physician later today. After prescribing a perapical x-ray of #6, you are not able to clearly see the apex, and so you also order a panoramic film that shows a narrowing and blurring of the anterior teeth. The radiopaque area extends through the middle of the film. The bone/teeth are faintly visible in the radiopaque area. Your next course of action is?
  - A. Retake #6 PA
  - B. Delay diagnosis until patient sees her MD
  - C. Prescribe Penn VK, and have patient call if not feeling better in 3-4 days
  - D. Wait for symptoms to localize



- 4. This child presents with no history of toothache. For the primary second molar, which treatment will be the longest lasting?
  - A. Glass Ionomer Slot Preparation Restoration
  - B. Multisurface Composite Restoration
  - C. Multisurface Amalgam Restoration
  - D. Stainless Steel Crown



- 5. Shelly, a new patient, presents as a referral from her physician. She is complaining of a sore lower front tooth following a bicycle accident 2 days earlier. While riding her bike, she hit a pothole causing her to suddenly stop, and she flew over the handlebars, hitting her face on the ground. What would your recommended treatment be?
  - A. Reschedule for a follow-up appointment in 10 days, continue to monitor
  - B. Write a prescription for Penn VK 500 mg and Vicodin 10 tabs as needed
  - C. Refer to Dr. Molar for an endo eval and a Pano
  - D. Request another PA #24/25, after having the patient remove her lip piercing

l,	_ attest to the Minnesota
Board of Dentistry that I have completed this self-assessment	on (date)
(Signature)	-

# **SELF ASSESSMENT ANSWERS**

## PATIENT COMMUNICATION

# 1. Answer: C

Spina Bifida is a congenital problem in the development of the spine. Up to half of the children born with this disease may develop a latex allergy. This may be due to repeated exposure to latex during the multiple surgeries necessary to treat health problems related to this disease. Because the rate of latex allergy is so high in these children, avoidance of *latex-containing* products is now frequently recommended to minimize the chance of sensitization. The Food and Drug Administration now requires labeling of latex rubber in all medical devices. In most cases, manufacturers now make many products that can be substituted for latex containing ones (for example, vinyl or nitrile gloves, latex-free prophy cups and rubber dam).

## References:

- Spina Bifida Assocation: Natural Rubber Latex Allergy in Spina Bifida
   (<a href="http://www.spinabifidaassociation.org/site/c.evKRI7OXIoJ8H/b.8277195/k.12A8/Natural\_Rubber\_Latex\_Allergy\_in\_Spina\_Bifida.htm">http://www.spinabifidaassociation.org/site/c.evKRI7OXIoJ8H/b.8277195/k.12A8/Natural\_Rubber\_Latex\_Allergy\_in\_Spina\_Bifida.htm</a>)
- Mayo Clinic- Diseases and Conditions: Latex Allergy (<a href="http://www.mayoclinic.org/diseases-conditions/latex-allergy/basics/risk-factors/con-20024233">http://www.mayoclinic.org/diseases-conditions/latex-allergy/basics/risk-factors/con-20024233</a>)

# 2. Answer: B

Each year nearly 40,000 Americans are diagnosed with Bell's Palsy. Symptoms include weakness or complete paralysis of the facial muscles, and it is the most common cause of facial paralysis. One of the most important consequences of facial paralysis is the effect on the eye muscles. These muscles are responsible for closing the eye. Blinking is important to lubricate and protect the eye. Facial paralysis results in the inability to close the eye, which can cause the eye to dry out. The cornea (covering of the eye) is very sensitive to drying. If the cornea is not kept lubricated it can result in irritation, pain and even blindness. Goggles or other type of protective eye wear should be used to protect the eyes from drying out and to protect it from foreign bodies.

#### Reference:

 Mayo Clinic- Diseases and Conditions: Bell's Palsy (<a href="http://www.mayoclinic.org/diseases-conditions/bells-palsy/basics/lifestyle-home-remedies/con-20020529">http://www.mayoclinic.org/diseases-conditions/bells-palsy/basics/lifestyle-home-remedies/con-20020529</a>)

# 3. Answer: A

In this case, Minnesota XYZ Dental Clinic met their obligation to make reasonable arrangements for emergency dental care for their patients by providing a prearranged agreement with Dr. Tongue to take care of any patients with an emergency problem when they are not available. Clinics are advised to maintain a clear message; and to provide a phone number to call in case of a dental-related emergency.

## Reference:

 ADA, Principles of Ethics and Code of Professional Conduct (http://www.ada.org/en/about-the-ada/principles-of-ethics-code-of-professional-conduct/)

Note: The Board of Dentistry has not adopted the ADA Principles of Ethics as a statute or rule, but refers to these principles and others to guide it when making determinations of compliance with standard of care.

## 4. Answer: B

A general dentist *may* restrict their practice to one or more specialty areas of dentistry. In doing so; they must advertise that their services are being provided by a general dentist and cannot refer to themselves as specialists. Only dentists who have successfully completed a postdoctoral course approved by the Commission on Accreditation in one of the recognized specialty areas of endodontics, oral and maxillofacial radiology, oral and maxillofacial surgery, oral pathology, orthodontics, pediatric dentistry, periodontics, prosthodontics and public health or have successfully completed certification by specialty examining boards may advertise as a specialist.

#### References:

- Minnesota Rule 3100.7000, Subpart 1 and 2 and 3 (https://www.revisor.mn.gov/rules/?id=3100.7000)
- American Dental Association (ADA) Recognized Dental Specialties
   (http://www.ada.org/en/education-careers/careers-in-dentistry/dental-specialties/specialty-definitions)
   (http://www.ada.org/en/education-careers/careers-in-dentistry/dental-specialties)

## 5. Answer: B

All providers are required to provide sign language interpreter services when such services are necessary to enable hearing impaired recipients to obtain covered services. Individuals with hearing impairments are protected under the Americans with Disabilities Act, and therefore, there is a mandate to provide assistance. Qualified interpreters for the deaf are certified, required to undergo training, and act within national ethical standards. Using family members and/or friends as interpreters undermines patient confidentiality and privacy.

# Reference:

 Americans with Disabilities-publications and questions call 800-514-0301(voice), 800-514-0383 (TTY)

## MANAGEMENT OF MEDICAL EMERGENCIES

## 1. Answer: B

During an asthma exacerbation (asthma attack), airways become swollen and inflamed, resulting in the muscles around the airways contracting causing breathing (bronchial) tubes to narrow. A short acting beta agonist such as albuterol dilates the bronchi, decreasing the resistance and increasing airflow to the lungs. These rescue medications are best for treating sudden symptoms, and provide a quick, temporary relief of asthma flare-ups. Having a bronchodilator in your clinic's emergency kit is strongly recommended.

#### References:

- Mayo Clinic- Diseases and Conditions: Asthma Attack
   (http://www.mayoclinic.org/diseases-conditions/asthma-attack/basics/definition/con-20034148? ga=1.109123533.917436805.1413392339)
- National Center for Biotechnology Information (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1586863/)

# 2. Answer: ALL

If you are with someone who is having an allergic reaction and shows signs of shock caused by anaphylaxis, there is an urgency to act fast. Anaphylaxis is a severe, potentially life-threatening allergic reaction. Even if you're not sure the symptoms are caused by anaphylaxis, take the following steps immediately:

- Call 911 or emergency medical help
- Get your patient in a comfortable position and elevate her legs
- Give medications to treat an allergy attack, such as an epinephrine auto injector or antihistamines, to help reduce the body's allergic response and improve breathing.
   Always be sure to replace epinephrine before its expiration date, or it may not work properly
- Administer oxygen to help compensate for restricted breathing

#### Reference:

Mayo Clinic- Diseases and Conditions: Anaphylaxis
 (http://www.mayoclinic.org/diseasesconditions/anaphylaxis/basics/definition/con-20014324? ga=1.108051402.917436805.1413392339)

## 3. Answer: B

Angina is chest pain or discomfort caused when the heart muscle doesn't get enough oxygenrich blood to function properly. It may present as pressure or squeezing in the chest. The discomfort also can occur in the shoulders, arms, neck, jaw or back. Angina pain may even feel like indigestion. Nitroglycerin, administered in a spray or a tablet under the tongue, may help address these pains by relaxing the blood vessels so the heart does not need to work as hard to get oxygen. Be aware that nitroglycerin can help with the *pain*, but does not cure the coronary artery disease.

## References:

- American Heart Association
   (http://www.heart.org/HEARTORG/Conditions/HeartAttack/SymptomsDiagnosisofHeartAttack/Angina-Chest-Pain UCM 450308 Article.jsp)
- National Institutes of Health (MedlinePlus)
   (http://www.nlm.nih.gov/medlineplus/druginfo/meds/a601086.html)

# 4. Answer: C

Most medical emergencies that occur in dental offices are brought on by apprehension to, or reaction from, the administration of local anesthesia. Of those emergencies, very few are due to reactions to the local anesthetic itself, but to the anxiety associated with the injection. Many patients who experience such a reaction think they are allergic to the local anesthetic. Allergic reactions rarely occur with local anesthetics used today.

#### Reference:

Malamed SF: Medical Emergencies in the Dental Office 7<sup>th</sup> ed, 2014

## 5. Answer: B

The updated wording clarified the need to maintain *continuous* CPR certification, with no timeline gaps. The course must always contain a hands-on portion. Please be sure to take the right course; if you have any questions about the course, feel free to contact the Board for clarification.

#### Reference:

- Minnesota Rule 3100.5100, Subp. 3A (https://www.revisor.mn.gov/rules/?id=3100.5100)
- American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care (<a href="http://www.heart.org/HEARTORG/CPRAndECC/Science/Guidelines/2010-AHA-Guidelines-for-CPR-ECC\_UCM\_317311\_SubHomePage.jsp">http://www.heart.org/HEARTORG/CPRAndECC/Science/Guidelines/2010-AHA-Guidelines-for-CPR-ECC\_UCM\_317311\_SubHomePage.jsp</a>)

## **ETHICS**

# 1. Answer:

It is not uncommon that friends often times become patients of record. The dentist should always inform the patient of the proposed treatment, and any reasonable alternatives, in a manner that allows the patient to become involved in treatment discussion. But, when requests are made that go beyond the scope of practice or expertise of the provider, boundaries must be kept clear at all times. Dentists should avoid interpersonal relationships that could impair their professional judgment or risk the possibilities of exploiting the confidence placed in them by a patient. A dentist may **not** perform non-dental medical procedures, and may **not** prescribe medications for non-dental issues.

# 2. Answer:

Everyone in this scenario meant well, but the dentist must follow office policies and procedures so that errors do not happen. As dental professionals, all have the duty to protect patients from harm. The obligations of a dental professional include keeping knowledge and skills current, knowing one's own limitations and when to refer to a specialist or other professional. This also includes knowing when and under what circumstances delegation of patient care to allied staff is appropriate. A dentist must first see a patient and prescribe what x-rays should be taken. Delegation to expose x-rays and monitor a patient on nitrous oxide is not allowed to an unlicensed dental assistant. (See Delegated Duty Chart - http://mn.gov/health-licensing-boards/images/DelegatedDuty%2520Chart%25201%2520Revised%252011-2014.pdf).

This violation could result in disciplinary action being warranted against the dentist for enabling the illegal practice of dentistry by the unlicensed assistant, which is also a criminal action for both the dentist and the assistant. Knowing what can appropriately be delegated to various staff members is critical for the dentist *and* the entire staff.

3. It is unethical (and a violation of Board of Dentistry regulations) for a licensed dental professional to practice while using controlled substances, alcohol or other chemical agents which impair the ability to practice. If a licensed dental professional with first-hand knowledge about another colleague who is unable to practice with reasonable skill and safety by reason of illness, use of alcohol, drugs, chemicals or any other materials, or as a result of any mental,

physical or psychological conditions, you have an ethical and regulatory responsibility to report such information to the Board of Dentistry.

Problems such as chemical dependency are common within the health professions and put every patient at risk of harm, as well as impacting the individual practitioner's well-being and ability to practice and their co-workers.

The Board of Dentistry was established to protect the public with regard to the practice of dentistry. The Health Related Boards joined together many years ago to establish the Health Professional Services Program (HPSP). HPSP ensures that licensed professionals who have been referred to them are appropriately assesses, and if needed, a monitoring arrangement is established to follow their health and abstinence to best protect the public. A licensee with reporting requirements may report concerns about their own or another licensee's possible impairment issues to either the Board or to HPSP. HPSP referrals allow the monitoring to happen without the Board being involved.

#### Reference:

- Minnesota Statute 150A.13, subd 1 (<a href="https://www.revisor.mn.gov/statutes/?id=150A.13">https://www.revisor.mn.gov/statutes/?id=150A.13</a>)
- Minnesota Statute 214.33

  Reporting Obligations (https://www.revisor.mn.gov/statutes/?id=214.33)

# 4. Answer: ALL

As it turns out, it is not an easily answered question. The Minnesota Board of Dentistry statues and rules are silent as it relates to the use of lasers by dental professionals. The current laws in Minnesota do not adequately address laser use by hygienists. At this time, the Minnesota Board of Dentistry would allow a dental hygienist to use a laser if the particular procedure they intend to perform with the laser is one that law and rules currently allows them to perform with other instrumentation or technology. So, the use of a laser is treatment specific.

Caution: Sulcular debridement is one of the functions of the diode laser that has been promoted for use by dental hygienists by laser manufacturing company representatives. Concerns are raised for the Board in that some of the product information for lasers used in dentistry includes a description for debridement as the removal of soft tissue. "Soft tissue curettage" is *not* a function that dental hygienists can perform in the State of Minnesota.

At this time, the Minnesota Board of Dentistry would allow a dental hygienist to use a laser if the particular procedure they intend to perform with the laser is one that law and rules currently allows them to perform. Finally, all dental professionals should be aware that the Board will not allow any allied dental profession to provide ANY service, including the use of a laser; if doing so would be beyond the scope of their education, experience and training.

#### References:

- Minnesota Statute 150A.05, Subd. 1a (https://www.revisor.mn.gov/statutes/?id=150A.05)
- Minnesota Board of Dentistry Newsletter-Vol. 20 No. 4 (http://mn.gov/health-licensing-boards/images/2005%2520Winter%2520Newsletter.pdf)
- American Dental Association Statement on Lasers in Dentistry
   <a href="http://www.ada.org/en/about-the-ada/ada-positions-policies-and-statements/statement-on-lasers-in-dentistry">http://www.ada.org/en/about-the-ada/ada-positions-policies-and-statements/statement-on-lasers-in-dentistry</a>)

#### 5. References:

Minnesota Department of Human Services- Child Protection
 (http://www.dhs.state.mn.us/main/idcplg?IdcService=GET\_DYNAMIC\_CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=id\_000152#)

# **RECORD KEEPING**

#### 1. Answer: C

A patient's dental records must be transferred, irrespective of the status of the patient's account. Digital radiographs shall be transferred by electronic communication, compact or optical disc or printed on *high-quality* photographic paper. All transferred film or digital radiographs must reveal images of diagnostic quality using proper exposure setting and processing procedures. When traditional film is used, the original x-ray must be kept by the practice as part of the complete, original patient record.

## Reference:

 Minnesota Statutes, sections 144.291 to 144.298 (https://www.revisor.mn.gov/statutes/?id=144&format=pdf)

# 2. Answer: C

The results of the intraoral/extraoral examination should always be recorded, including if the findings are normal. Additional notes should detail anything noted that was abnormal. Records should be comprehensive, including documenting the findings that led to a diagnosis.

#### Reference:

 MN Record Keeping Rule 3100.9600, Subp. 6 (https://www.revisor.mn.gov/rules/?id=3100.9600)

# 3. Answer: D

For volunteering or working at non-primary practice locations, an original mini-license may be displayed, or a Board-issued duplicate license and renewal certificate may be displayed, or a Board-issued mini-license (no renewal certificate) may be displayed. It is a violation of Board regulations to use a photocopy of the license or renewal certificate for display purposes.

# Reference:

 MN Statute 150A.06, Subd. 6 (https://www.revisor.mn.gov/statutes/?id=150A.06)

# 4. Answer: A

#### References:

- MN Record Keeping Rule 3100.9600 (https://www.revisor.mn.gov/rules/?id=3100.9600)
- MN Statutes, sections 144.291-144.298 (https://www.revisor.mn.gov/statutes/?id=144&format=pdf)
- MN Statute 150A.04
   (https://www.revisor.leg.state.mn.us/statutes/?id=150A.04)
- MN Statute 150A.08 (https://www.revisor.mn.gov/statutes/?id=150A.08)

## **INFECTION CONTROL**

#### 1. Answer: B

The area of dental unit water quality is often an overlooked area of infection control. Consideration for potential bacterial contamination in treatment water with dental devices that are connected to the dental water system and are used in the patient's mouth would include handpieces, ultrasonic scaler, and air/water syringes. The process of physically flushing is recommend after each patient for a minimum of 20-30 seconds, even for units that have anti-retraction valves. This procedure is intended to flush out patient material that might have entered the turbine, air or waterlines.

Any oral surgical procedures that involve an incision, excision, or reflection of tissue that exposes the normally sterile areas of the oral cavity including a biopsy, periodontal surgery, apical surgery, implant surgery and surgical extractions of teeth would require the use of sterile saline or sterile water as a coolant/irrigation. Conventional dental units cannot reliably deliver sterile water even when equipped with independent water reservoirs because the water-bearing pathway cannot be reliably sterilized. Delivery devices (e.g., bulb syringe or sterile, single-use disposable products) should be used to deliver sterile water.

#### Reference:

 American Dental Association- Oral Health Topics: Dental Unit Waterlines (<a href="http://www.ada.org/en/member-center/oral-health-topics/dental-unit-waterlines">http://www.ada.org/en/member-center/oral-health-topics/dental-unit-waterlines</a>)

# 2. Answer: A

Hand hygiene should be performed with (a non-antibacterial or an antibacterial) soap and water when the hands are visibly dirty or contaminated with blood or saliva. For hand hygiene during surgery, plain soap and water followed by drying is the appropriate method; then use an alcohol surgical hand rub with persistent activity or an antimicrobial soap and water. Consideration should be made when choosing a compatible lotion. The effect of petroleum or other oil emollients may weaken the glove integrity. It is important that infection-control procedures are performed correctly and that appropriate products and equipment involved are selected and used as directed by the manufacturers. Use disposable or washable containers for hand washing agents. Soap should not be added to a partially empty dispenser; this practice of "topping off" can lead to bacterial contamination. Containers should be washed and thoroughly dried before refilling. This will keep any contaminants from being carried over to the fresh product. The success of infection control cannot always be monitored on a routine basis, training and continuing education is key.

Another key hand washing tip: long or synthetic nails create an environment that is difficult to keep free of infectious organisms, and pose a higher risk for glove failure.

#### Reference:

 CDC's MMWR Dec. 2003 "Guidelines for Infection Control in Dental Health Care Setting"

(http://www.cdc.gov/oralhealth/infectioncontrol)

## 3. Answer:

A – YES

B-YES

C-YES

Biological indicators (spore tests) are the most accepted method for monitoring the sterilization process, because they assess it directly by killing known highly resistant microorganisms, rather than merely testing the physical and chemical conditions necessary for sterilization.

Instrument processing requires a series of steps to assure that contaminated patient-care items are safe for re-use. All procedures must be performed correctly every time, to make sure that items are processed properly and in the safest way possible. When processing contaminated instruments, always wear puncture resistant utility gloves to prevent injury, and wear face and eye protection to protect against splash and spatter of contaminated materials.

#### Reference:

- Minnesota Administrative Rule Chapter 6950.1030 (<a href="https://www.revisor.mn.gov/rules/?id=6950.1030">https://www.revisor.mn.gov/rules/?id=6950.1030</a>)
- CDC's MMWR Dec. 2003 "Guidelines for Infection Control in Dental Health Care Setting" (http://www.cdc.gov/oralhealth/infectioncontrol)

## 4. Answer:

The Hazardous Communication Program should include:

- 1. Labeling of hazardous containers
- 2. Maintaining an SDS for each chemical
- 3. Employee training
- 4. Preparing a written plan
- 5. Obtain a copy of OSHA's Hazard Communication Standard
- 6. Review/revise your Hazard Communication Program periodically

Other items could include: obtaining a copy of the rule, reading and understanding the requirements, conducting an inventory of chemicals, establishing and maintaining procedures and evaluating effectiveness.

# Reference:

 OSHA Fact Sheet: Effective Hazard Communication Program (www.osha.gov/Publications/OSHA3696.pdf)

## DIAGNOSIS AND TREATMENT PLANNING

#### 1. Answer: D

Certain dental procedures may allow bacteria from the mouth to enter the bloodstream. These bacteria can infect the heart valves and lining of the heart, causing them to become inflamed. This inflammation is called infective endocarditis (IE). Antibiotics before dental procedures are recommended for patients with the highest risk of IE. Anyone who is at risk of developing IE should follow a program of careful mouth and tooth care. This includes a professional cleaning

every six months, twice daily tooth brushing and once daily flossing. These measures can help to prevent plaque and bacterial from building up around the gums of the teeth.

The American Heart Association follows these issues very carefully, and publishes advice regarding the use of prophylactic antibiotics. When there is a question or a doubt, it is always best to contact the patient's physician before proceeding with dental care. And, remember to document that conversation or communication in the patient record.

# Reference:

The American Heart Association: Infective Endocarditis
 (http://www.heart.org/HEARTORG/Conditions/CongenitalHeartDefects/TheImpactofCongenitalHeartDefects/Infective-Endocarditis\_UCM\_307108\_Article.jsp)

#### 2. Answer: B

This issue has been a topic of discussion in both Minnesota as well as with Boards of Dentistry across the country. Dental therapists, dental hygienists, and dental assistants may *only* perform the procedures that are specifically identified in statute or rule as ones that can be delegated (their scope of practice). If you have specific questions about this information, you may wish to contact your practice attorney or an attorney representative of your liability insurance carrier.

#### Reference:

- Minnesota Stat. 150A.05, Subd 1. And 150A.05, Subd. 1a (https://www.revisor.mn.gov/statutes/?id=150A.05)
- Delegated Duty Chart
   (http://mn.gov/health-licensing-boards/images/DelegatedDuty%2520Chart%25201%2520Revised%252011-2014.pdf)
- Minnesota Board of Dentistry's Board Resolution relating to Facial Cosmetics and Pain Management
- (<a href="http://mn.gov/health-licensing-boards/images/Facial%2520Cosmesis%2520and%2520Pain%2520management.pdf">http://mn.gov/health-licensing-boards/images/Facial%2520Cosmesis%2520and%2520Pain%2520management.pdf</a>)

# 3. Answer: A

A high quality radiograph with maximum detail is essential for proper diagnosing. A proper film will show the teeth and anatomical structures accurately without distortion. It will have proper density and contrast to aid in detection of dental disease.

#### Reference:

 Dentalcare.com: Intraoral Radiography: Principles, Techniques and Error Correction (<a href="http://www.dentalcare.com/en-US/dental-education/continuing-education/ce137/ce137.aspx?ModuleName=coursecontent&PartID=4&SectionID=-1">http://www.dentalcare.com/en-US/dental-education/continuing-education/ce137/ce137.aspx?ModuleName=coursecontent&PartID=4&SectionID=-1</a>)

#### 4. Answer: D

## Reference:

 American Academy of Pediatric Dentistry: Guideline on Restorative Dentistry (<a href="http://www.aapd.org/media/Policies Guidelines/G Restorative.pdf">http://www.aapd.org/media/Policies Guidelines/G Restorative.pdf</a>)

# 5. Answer: D

# Reference:

- American Dental Association: Dental Radiographic Examinations: Recommendations for Patient Selection and Limiting Radiation Exposure (<a href="www.ada.org/~/media/ADA/Member%20Center/Flles/Dental\_Radiographic\_Examinations\_2012.ashx">www.ada.org/~/media/ADA/Member%20Center/Flles/Dental\_Radiographic\_Examinations\_2012.ashx</a>)
- American Dental Association- Oral Health Topics: Oral Piercing (http://www.ada.org/en/member-center/oral-health-topics/oral-piercing)